

**EXHIBIT C**  
**Consent Decree**  
**Lehigh Cement Company Closed CKD Pile Site**  
**Scope of Work and Schedule**

This Scope of Work implements the Cleanup Action Plan (Exhibit B) to address groundwater contamination at the Lehigh Cement Company Closed CKD Pile Site (Site) (Exhibit A) in Metaline Falls, Washington. This Scope of Work was prepared by the Department of Ecology (Ecology), and is to be used by the potentially liable person (PLP), Lehigh Cement Company (Lehigh), to develop plans and designs in order to implement the cleanup action selected for the Site.

Lehigh shall furnish all personnel, materials, and services necessary for, or incidental to, performing the cleanup action selected for the Site.

The Scope of Work contains the following tasks, to be accomplished in accordance with the schedule below:

Task 1: Engineering Design Report

The Engineering Design Report will comply with the requirements of WAC 173-340-400(4)(a). The Engineering Design Report will provide engineering concepts and design criteria for both major components of the selected cleanup action, the funnel and gate system and the gravity drain. The funnel and gate design and configuration will be one aspect of the design. The Engineering Design Report will describe the location of the funnel component of the cleanup action, as well as the materials and methods used for the funnel construction. The gate design will describe the gate and the treatment technology utilized to adjust the pH and remove arsenic, chromium, lead, and manganese. The Engineering Design Report will also include appurtenances such as the carbon dioxide tank, compressor, gauges, piping, and other information necessary to prepare bid specifications documents.

The second component of the cleanup action addressed in the Engineering Design Report is the gravity drain. The Engineering Design Report will include the gravity drain location, as well as the materials and methods used for drain construction. The Engineering Design Report will also include methods to evaluate the source control provided by the gravity drain. The Engineering Design Report should be adequate to obtain the necessary permits or meet the substantive provisions of laws for which there is a permit exemption in MTCA for the Site remediation.

To document the operation of the Cleanup Action, as well as effects that the Cleanup Action has on the local groundwater, Lehigh will collect data in accordance with the Compliance Monitoring Plan (CMP) (see Task 3). Such data will be collected using:

- a. procedures to monitor the flow captured by the gravity drain;
- b. groundwater wells in the area between State Route 31 and the funnel portion of the Cleanup Action. These wells will document the groundwater level between the funnel component and the Closed CKD Pile.

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- c. monitoring locations in the small untreated area between the funnel portion of the Cleanup Action and Sullivan Creek. These locations will be used to document progress of the natural cleanup of the groundwater in this area.

The CMP will describe specifics for these three data collection efforts above, as well as the other data needed for the cleanup action.

The Engineering Design Report will include a section describing the institutional controls for the Site. Institutional controls will be required for portions of Parcels 269543, 258000, 261251, 220677, and 269543, which contain the groundwater contamination plume. Lehigh owns the Parcels that overlay the groundwater contamination plume, and therefore, institutional controls are not necessary for adjacent landowners or third parties. The controls will prohibit groundwater usage except for purposes related to the cleanup action, such as groundwater monitoring.

The restrictive covenant to restrict the groundwater usage is Exhibit F of the Consent Decree. The institutional control section of the Engineering Design Report will provide the location of physical barriers and signs to prevent exposure to contamination.

Following completion of the Engineering Design Report, the Construction Plans and Specifications will be completed, submitted to Ecology for review and approval, and made available for the purpose of bidding on the project construction. The Construction Plans and Specifications will comply with WAC 173-340-400(4)(b). The bid process should be completed in order to meet the construction start date.

#### Task 2: Permits and Substantive Conditions of Permit-Exempt Laws

Lehigh must obtain several permits prior to construction of the remedial systems for the cleanup action, or identify substantive requirements of laws for which MTCA creates a permit exemption. The permits will include National Pollution Discharge Elimination System (NPDES), Section 401 Water Quality Certification, U.S. Army Corps of Engineers Section 404 Dredge and Fill and Section 10 Rivers and Harbors Act permits. In addition, Ecology will identify the substantive provisions of the Shoreline Management Act, Floodplain Management Act, and Hydraulics Project Approval that Lehigh must meet in implementing the cleanup action. Public review and comment on each of the above permits and substantive conditions will be provided after entry of the Consent Decree.

#### Task 3: Compliance Monitoring Plan

The Compliance Monitoring Plan will be developed prior to installation of the remediation systems. The Compliance Monitoring Plan will include protection monitoring, performance monitoring, and confirmational monitoring plans. The Compliance Monitoring Plan will also include a Sampling and Analysis Plan (SAP) and a Quality Assurance Project Plan (QAPP). Each plan will meet the requirements of WAC 173-340-410. All sampling data shall be submitted to Ecology according to the requirements of Section X of the Consent Decree.

#### Task 4: Operations and Maintenance Plan

An Operations and Maintenance (O&M) Plan will be developed in accordance with WAC 173-340-400(4)(c) for all approved remediation systems other than the cover and stormwater system for the Closed CKD Pile. An approved Post-Closure Care and Maintenance Plan for the cover and stormwater systems is presented as Exhibit G of the Consent Decree. The O&M Plan will include the monitoring and replacement schedules for the major remediation system components. The O&M Plan shall identify the person(s) responsible for each task outlined in the O&M Plan and relevant contact information. The O&M Plan will be completed prior to installation of the remediation systems. The O&M Plan shall describe and provide for continued implementation of the institutional controls for the Site as developed in the Engineering Design Report.

#### Task 5: Cleanup Action Implementation

The Engineering Design Report will be used to develop bid specifications to be used in obtaining bids for cleanup action implementation. Based on the Engineering Design Report and the project bids, Lehigh will prepare a punch list of items to be completed during cleanup action implementation. The punch list items will be tracked as the implementation progresses.

The Feasibility Study Technical Report (FSTR) contains a conceptual design for the cleanup action. The conceptual design includes a preliminary estimated description and alignment for the major cleanup action components, the funnel and gate and the gravity drain. Cleanup action details may be modified during the final design phase, pending Ecology's review and approval of the Engineering Design Report. Thus, the following description of cleanup action implementation is preliminary.

The first major component of the cleanup action will be the installation of the funnel and gate system. The funnel will consist of a subsurface hydraulic barrier constructed of a low-permeability material such as a bentonite slurry or high density polyethylene (HDPE) that will extend vertically from the surface to key into the underlying low-permeability soils. The funnel will be located on Lehigh property that is east of State Route 31. Based on the conceptual design submitted in the FSTR, the southern leg of the funnel will be located just west of monitoring well MW-8. The northern leg of the funnel will be located south of PM-15 and PM-19 and north of PM-18. Groundwater treatment will occur in the gate where silicone tubing will be installed to diffuse carbon dioxide into the groundwater.

The second major component of the cleanup action will be the installation of the gravity drain. The gravity drain will be placed utilizing directional drilling techniques and located along the southern edge of the Closed CKD Pile. The drain will be placed to intercept groundwater and route the water to discharge near the southern leg of the funnel. Intercepted water may be unaffected by CKD or it may require treatment. Consideration will therefore be given to the ability to route the captured groundwater into the treatment system, if necessary, or to discharge it to subsurface structures. Water flow within the gravity drain will be measured to evaluate the source control provided.

As noted in Task 1, the CMP will contain details on monitoring wells and data collection to document operation of the gravity drain, the progress towards natural cleanup in the untreated area, and the groundwater surface in the area between the Closed CKD Pile and the funnel component. Lehigh may use existing wells, install new wells or use a combination in the CMP. Monitoring of these wells will commence prior to installation of the gravity drain.

As implementation progresses Lehigh will review the punch list and address remaining punch list items to complete construction according to the project schedule below. As described in the Consent Decree, Lehigh will seek written approval for any significant deviations from Ecology.

#### Task 6: Institutional Controls

After Lehigh completes construction of the cleanup action, it will implement the institutional controls described in the approved Engineering Design Report and approved Operations and Maintenance Plan.

#### Task 7: Cleanup Action Report

Lehigh will submit a Cleanup Action Report in accordance with WAC 173-340-400 (6)(b) 120 days after completion of the construction of the cleanup as defined by “construction complete” as set forth in schedule below. Laboratory data shall be included in the report and will be completely reviewed according to the quality assurance and quality control procedures outlined in the SAP and QAPP. Raw data shall be submitted to Ecology following receipt of the data from the analytical laboratory. The Cleanup Action Report will be submitted with boring logs and other graphical representations of the work performed. The report will also provide documented evidence that institutional controls have been implemented.

### **SCHEDULE**

Each of the documents required below are subject to Ecology’s review and approval. Ecology will approve, approve with conditions, or disapprove of such documents. If Ecology disapproves a document, Ecology will provide comments to Lehigh and the parties will establish a mutually agreed upon date for Lehigh’s re-submittal of the document, not to exceed forty-five (45) days after Lehigh’s receipt of Ecology’s comments. Lehigh will then submit a revised document that addresses Ecology’s comments.

<u>Deliverables</u>	<u>Date Due</u>
Effective date of Consent Decree	Start
Lehigh submits Draft Engineering Design Report	60 days after start
Lehigh submits Final Engineering Design Report	30 days after Lehigh receives Ecology’s written comments on Draft Engineering Design Report
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Ecology approves the Final Engineering Design Report	30 days after receipt
Lehigh submits Construction Plans and Specifications	30 days after Ecology approval of Engineering Design Report
Lehigh submits Operations and Maintenance Plan and Compliance Monitoring Plans	30 days after submittal of Plans and Specifications
Begin constructing cleanup action	120 days after Ecology approves Final Engineering Design Report
Construction is complete	180 days after construction begins
Lehigh implements institutional controls	90 days after construction is complete
Lehigh submits Draft Cleanup Action Report	120 days after construction is complete
Lehigh submits Progress Reports	In accordance with Section XI of Decree.